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# Understanding Catalan University dropout from a comparative approach

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#### Abstract

Last decade yielded important research to understand the extent to which university dropout is having relevant consequences for higher education. The dropout rate has also been quantified and used as an indicator of performance (Dearing, 1996; Bricall, 2000; Rauret & Grifol, 2001; OECD, 2008; Mandelson, 2009). The aim of this paper is to offer an extensive perspective on how university dropout is being studied and faced in several contexts (America, Europe and, more concretely, Spain and Catalonia), in order to contribute to the provision of action plans which are designed to increase the students' retention and performance at Catalan HEI.

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# 1. Introduction

The Bricall (2000), Attali (1998), Dearing (1997) and Mandelson (2009) reports on the Spanish, French and British educational systems, respectively, brought to light the dropout issue in the nineties as it affected the effectiveness and efficiency of the university system. They reaffirmed the idea that the phenomenon of university dropout rates had to be reduced in order to increase the quality standards and productivity of the institution as well as student satisfaction. Ever since the nineties, and throughout the globe, the dropout rate has been quantified and used as a performance indicator. Dropout rate has been a widely-discussed topic by the academic authorities within each country and institution, and in Europe has grown with adaptation to the European Higher Education Area (EHEA). However, actions favouring student retention have still not been assessed.

Dropout takes on broader dimensions when extended –almost universally– to access to university studies. Behind this problem lies the economic cost of university studies available to the majority of students and the inefficient use of resources, as well as the problems of dissatisfaction for those who wished to be educated but did not have their expectations fulfilled or have not been properly and professionally oriented towards the type of goals they could hope to fulfill. Undoubtedly, the challenge facing the systems is to maximize the development of a country's human resources through its higher education institutions.

This paper provides a general overview of the nature of student dropout in Spain and Catalonia compared to other university contexts. Compiled data comes from several reports produced by national and international organizations

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such as the Organization for Economic Co-operation and Development (OECD), the National Center for Education Statistics (NCES) of the United States, the International UNESCO Institute for Higher Education in Latin America and the Caribbean (IESALC), the "Conferencia de Rectores de las Universidades Españolas" (CRUE), the "Observatoire National de la Vie Étudiante" of France, the National Audit Office (NAO), the Higher Education Funding Council for England (HEFCE), the Higher Education Information System of the United Kingdom, RAND Europe and the Banca di Italia. In particular, it addresses the common reasons for this phenomenon in America, Europe and, more specifically, in Spain and Catalonia, and illustrates the difficulty of measuring dropout since different countries and organizations use different formulas and concepts such as desertion, retention and survival rates, among others. The final purpose is to provide an extensive perspective on how this phenomenon is being studied and dealt with in several contexts, in order to contribute to the provision of action plans which are designed to increase students' retention and performance at HEI.

# 2. Measurement of the university dropout

The dropout rate is an indicator of complex analysis and there is no consensus on its significance; rather it lends itself to contextual use. Nevertheless, universities do not have a systematized univocal way of collecting data regarding their student dropouts, which makes it difficult to measure. For this reason, the dropout concept and the terms related to it are both conceived and perceived differently, and are assigned terminology that has diverse connotations according to the context —desertion, stopping, completion, discontinuity, (non-) persistence, survival or retention. As a consequence, the formulas applied to analyze this phenomenon differ between countries and, thus, carrying out comparative studies is more than a challenge.

In short, we find that HEIs measure dropout and desertion as much as they measure completion and/or survival. The first two concepts (dropout and desertion) are probably easier to calculate if they are only associated with the number of students who drop out of studies when they do not enroll in any subject or module during a number of consecutive academic years. In Spain, dropout occurs when a student who registered in a course do not formally enroll again for the next two course periods (Hernández, 2008). The two latter concepts (completion and survival) represent an exercise of greater accuracy: on the one hand, the calculations of the percentages of qualified people assumes projecting an estimation of the expected completion rates; on the other hand, the calculation of the probability of students continuing and completing a degree involves having at hand a wider set of variables to be able to offer significant data, as well as to consider part-time students or those slow to complete their degree, and full-time students.

# 3. About the access, progression and completion of university studies

The reference report, Education at a Glance prepared in 2010 by the OECD, sustains that the rates of university level graduates have increased considerably in the last decades (21 percentage points over the past 13 years), that the expansion of the university education has had a positive impact on individuals and on national economies, and that, up to now, there are no signs of an "inflation" in degree value. For this reason, we can affirm that the current performance of the educational system is related to access to university education, participation in the university system and obtaining university degrees or completing studies.

Additionally, the OECD (2010) report also shows the current performance of the educational system in the achievement of a university education degree, that is, the percentage of the population in the typical age of obtaining and completing the university education that continues and successfully finishes the study program. In that regard, the number of students who finish their university level education is increasing. In the twenty-six countries with comparable data, an average of 38% of the youngsters complete their university studies. However, there are great differences between countries in the percentages of students who have successfully completed either a university program or a university education with professional orientation. In the calculation of those OECD countries with available data, an average of 31% of students enrolled in university level education do not conclude their studies.

Spain, together with Ireland, offers access to higher education in a more equitable way, while in Austria, Germany, France and Portugal only half of the students from a working class background are likely to enter higher education compared to what the OECD suggests according to the proportion of population for each country. There are great variations in the percentages of young people who expect to continue their studies with a university education. "It is estimated that 56% of young adults in OECD countries will enter tertiary-type A programmes during their lifetime if current patterns of entry continue" (OECD, 2010, p. 48). The indicators show that the expectations differ depending on each country and according to the levels of individual performance, gender, socioeconomic origin and immigrant status.

## 4. The case of Catalonia's university studies dropouts

The complexity of dropout in the international higher education panorama led the Catalan University Quality Assurance Agency (AQU Catalunya) to conduct research about students who do not persist in their studies in the Catalan university context (Gairín, Triadó, Figuera et al., 2010). The information on the dropout was obtained from the AQU Catalonia database (years 2000-2001 and 2001-2002) and it cannot be compared with the data from the CRUE report on Spanish universities since there is no available data for the studied years. What we do know is that in 2006, of the total dropouts registered at the Spanish public universities, 35.5% corresponded to students enrolled in short cycle degrees and the remaining 64.5% corresponded to long cycle degree students. In the same year, in Catalonia the figures were 34.1% and 65.9%, respectively (CRUE, 2006).

Among the most relevant results we would like to emphasize that the dropout distribution among the different universities — average of the short and long cycles— showed that there are not many differences between universities, and that the dropout affects all the degree programs at different universities. Although the average dropout rate is 33.6%, the different university rates fluctuate between 28.3% for the UPF (Universitat Pompeu Fabra) and 37.2% for the UPC (Universitat Politècnica de Catalunya). In relative terms, the higher the enrolment figures, the higher the dropout rate. Degree choice makes the differences clearer. Dropout rates by degree choice oscillate between 20% and 60%, and are even higher in certain engineering courses or lower in less traditional studies like physiotherapy. Such variation is due to discipline typology, teaching and learning culture, student ratios, facilities, student support, and from satisfaction, motivation and academic quality of the specific discipline. While recognizing the wide range between them, some degrees with highest dropout rate are in social sciences (40%), technology (29.6%) and arts and humanities (17.2%).

Where personal features are concerned, a dropout's socio-demographic profile shows little clear differentiation as to age, gender, parents' studies or employment. Dropout affects the different age groups, more men than women (51.4% against 48.6%, respectively); and cannot be related to the parents' study level or employment. In this sense, the students' socio-demographic profile is not a determinant factor in the dropout phenomena.

Regarding academic variables, the origin branch of the students who give up their degrees indicates that the main access profile to the university corresponds to students coming from A levels (Bachillerato) and from vocational training. Not surprisingly, most of the students accessing HEI come from Bachillerato.

The data shows that among the total number of students who give up their studies, there are two significant groups: students who have sat the Selectividad (university entrance examination) outside Catalonia (with an 18.4% dropout rate) and students about whom we do not have information because they have been transferred from other HEI (29%).

Over 50% of students abandon their studies during the first year. This corroborates what other research has shown: the attention necessary to the student's first year's experience. The average period spent by a dropout at university is a little over one and a half years. One of the main factor groups that explains university dropout is related to secondary students' access to the studies they wish to pursue, after passing the Selectividad exam. Some students do not gain access to their chosen course because they do not achieve the cut-off grade or they choose the wrong course as a result of a lack of information, guidance or other contextual variables. Dropouts in the first year can be attributed to the moving about of students between degrees until they gain access to the degree they want.

Academic factors (Álvarez, et al., 2006) also play a part and, notable among these, is previous academic training. In Catalonia and Spain, recent PISA exams (Ferrer, 2009) reveal that, although there have been some improvements, the performance of high school students still remains below the European average in some of the aspects measured, which may justify part of the current dropout rates.

The excess of theoretical orientation and poor links with the job market are other academic factors that contribute to explaining the differences between the dropout rates of Catalan universities and those of other surrounding countries. Traditionally, the Spanish university system has had little or no link with the productive network, both in terms of the design of study plans, and the transfer of knowledge (CYD, 2010).

The usual attraction and induction policies (welcome days, open days or welcome programs) have enabled universities to keep students for the first academic year, but the experience of the first year is still unsatisfactory for many students since the huge dropout takes place during this first year. This shows a lack of consistent and transparent retention policies, other than once-off and changeable actions, of which the university community is often unaware, that some Catalan universities have implemented during recent years (tutorials, guidance services, psycho-pedagogical offices, student-mentor programs, etc.).

In line with the global trend to promote research, common policies in the teaching profession for the Spanish and Catalan university systems prioritize production in research to the detriment of the quality of the teaching. As a result, the concern for learning and student satisfaction and retention is left to a more reduced group. University teaching degrees are now less attractive, there is a lack of tools that facilitate the generational change of staff by fostering the recruitment of young talented individuals or a more balanced distribution of the teaching body throughout different knowledge areas.

Higher education scholarships and study grants have not proved to be sufficient to encourage students to continue their studies. In this regard, it is essential that efforts are put in place to promote grants, increase loan programs and put in place incentives that prioritize the students' academic performance and, in short, the efficiency of the university system.

Lastly, as regards the entire Catalan public university system, the late implementation of the new study plans in accordance with the principles comprising the Bologna process has prevented its real impact on the dropout and retention of university students from being comprehensively assessed. This, however, has been verified in Germany (Klieme et al., 2008).

#### 5. Conclusions

The access of a greater percentage of the population to university studies, as well as quality as a reference factor, changes in the organization and in the concept of higher education promoted by the Bologna Declaration, and, finally, the transformations that the knowledge society is generating in professional learning environments has aroused politicians' and university managers' interest in the phenomenon of dropout. In addition, higher education institutions (HEI) must now give explanations for their actions to society as a public service, and university dropout must be reduced.

This paper demonstrates that dropout is a multi-factor phenomenon, in the sense that the reasons behind it stem from the interaction of a wide set of personal and contextual factors. This interaction explains the importance of validating integrating models that facilitate the creation of early diagnostic tools, the identification of risk groups and the design of intervention proposals suitable for different situations.

In this international review, it has been clearly proven that despite the diversity of research methodologies which enormously hinder an overall treatment and unified approach to the dropout phenomenon, dropout itself has a severe impact on students' lives and those of their families and, in turn, on the skills of each country's labor market. According to the OECD (2010, p. 20), "tertiary education serves as an indicator of the rate at which countries produce advanced knowledge. Countries with high graduation rates at tertiary level are also those most likely to be developing or maintaining a highly skilled labour force".

The literature review carried out has highlighted the lack of a standardized system that can measure dropout and determine the causes that lead a student at a certain moment to decide not to continue with the university studies

they have started. Although it is true that specific experiences have taken place in Spain and in other countries, desertion or dropout is a clear indicator of a worrying institutional disappointment.

Statistics and international analyses of different researches have demonstrated that nowadays a significant percentage of the population accesses university degrees, but that, at the same time, the number of persons who give up their studies too soon is also increasing (about 29%), influenced often by work-related factors. Different reports by the OECD and other organizations have warned about the high dropout rates and the unavoidable consequences, both social and individual, that stem from these.

The case of the Catalan higher education system does not differ too much from that of Spain - the dropout rate of 30% is also on the agendas of Catalan politicians - although regional differences can be observed. Our findings suggest the importance of contextualizing retention strategies to meet the particular needs of the degrees, schools and universities and understand the potential influence of national policies, management priorities, learning traditions and organizational cultures.

Retention is, therefore, considered a determining factor of the prestige, credibility and economic stability of universities and, consequently, of the university system. On the one hand, retention brings great benefits to the university and to society through stably maintaining students' enrolments to guarantee the university budget; and, on the other hand, because students' satisfaction and achievement contributes to the successful completion of their studies.

Retention is, however, a necessary but non-sufficient condition. As Tinto (1987, p. 15) states, "the secret of successful retention programs is no secret at all, but a reaffirmation of some of the important foundations of higher education. [...] Though successful retention programming does require some skill and not an inconsiderable amount of effort, it does not require sophisticated machinery. It is within the reach of all institutions if the only give serious attention to the character of their educational mission and the obligations it entails. [...] with the notion that successful retention is no more than, but certainly no less than, successful education".

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